

d 13 9 8 all

L3 ANSWER 9 OF 10 MEDLINE on STN  
AN 97075209 MEDLINE  
DN PubMed ID: 8917635  
TI Induction of an antibody response in mice against human  
**papillomavirus** (HPV) type 16 after immunization with HPV  
recombinant **Salmonella** strains.  
AU Krul M R; Tijhaar E J; Kleijne J A; Van Loon A M; Nievers M G; Schipper H;  
Geerse L; Van der Kolk M; Steerenberg P A; Mooi F R; Den Otter W  
CS European Cancer Centre, Amsterdam, The Netherlands.. ecc@euronet.nl  
SO Cancer immunology, immunotherapy : CII, (1996 Sep) 43 (1) 44-8.  
Journal code: 8605732. ISSN: 0340-7004.  
CY GERMANY: Germany, Federal Republic of  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 199612  
ED Entered STN: 19970128  
Last Updated on STN: 19970128  
Entered Medline: 19961210  
AB Human papillomaviruses (HPV) are present in approximately 95% of all  
cervical carcinomas and the HPV E6 and E7 genes are continuously expressed  
in these lesions. There is also circumstantial evidence that often  
natural immunity against HPV is generated and that this is of influence on  
HPV-induced lesions. Stimulation of the immune system by proper  
presentation of relevant HPV antigens might, therefore, lead to a  
prophylactic or therapeutic immunological intervention for HPV-induced  
lesions. For this purpose we have expressed the E6 and E7 protein of HPV  
16 in an attenuated strain of **Salmonella** typhimurium (SL3261,  
aroA mutation), which has been used extensively as a live vector. Live  
recombinant **Salmonella** vaccines have the ability to elicit  
humoral, secretory and cell-mediated immune responses, including cytotoxic  
T cells, against the heterologous antigens they express. This report  
describes the construction of recombinant **Salmonella** strains  
expressing the HPV 16 E6 and E7 proteins, and the induction of an  
HPV-16-specific immune response in mice after immunization with these live  
vectors.  
CT Antibodies, Viral: IM, immunology  
Antibody Formation  
\*Bacterial Vaccines: IM, immunology  
Genes, Viral: IM, immunology  
\***Papillomavirus, Human: IM, immunology**  
Recombinant Proteins: IM, immunology  
Recombination, Genetic  
    **Salmonella Infections: IM, immunology**  
    **Salmonella Infections: PC, prevention & control**  
    **Salmonella Phages: IM, immunology**  
    **Salmonella typhimurium: GE, genetics**  
    **Salmonella typhimurium: VI, virology**  
\*Vaccines, Synthetic: IM, immunology  
CN 0 (Antibodies, Viral); 0 (Bacterial Vaccines); 0 (Recombinant Proteins); 0  
(Vaccines, Synthetic)  
  
L3 ANSWER 8 OF 10 MEDLINE on STN  
AN 97093882 MEDLINE  
DN PubMed ID: 8939345  
TI Mutagenicity of endocervical mucus associated with genital tract  
infections.  
AU Parashari A; Singh V; Gupta M M; Satyanararayana L; Chattopadhyaya D; Sehgal  
A  
CS Division of Immunology and Virology, Institute of Cytology and Preventive

Oncology (ICMR), New Delhi, India.

SO Cancer detection and prevention, (1996) 20 (6) 597-600.  
Journal code: 7704778. ISSN: 0361-090X.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199702

ED Entered STN: 19970305  
Last Updated on STN: 19970305  
Entered Medline: 19970218

AB Mutagenic metabolites produced due to chronic infection of cervical epithelium are suspected to be a plausible risk factor in cervical carcinogenesis. One hundred twenty-four symptomatic women attending a maternal and child health (MCH) clinic were studied clinically, cytologically, microbiologically, and biochemically for genital tract infections and for the presence of mutagens in the endocervical secretions using Ames' test. Human **papillomavirus** (HPV) was the leading infection (53.3%), followed by chlamydial infection (25.8%) and seropositivity for herpes simplex virus (25.1%). Mutagenic products in the endocervical secretions was detected in 23 women (18.5%). The univariate and multivariate (adjusted for other genital infections, age, and parity) analysis showed that the mutagenic mucus was associated with only chlamydial infection of endocervical region (OR = 3.7; 95% CI = 1.7,7.3). This shows that chlamydia is associated with mutagenicity of endocervical mucus.

CT Check Tags: Female; Human  
\*Cervix Mucus: ME, metabolism

d 13 1-10 ti

- L3 ANSWER 1 OF 10 MEDLINE on STN  
TI Immunogenicity against human **papillomavirus** type 16 virus-like particles is strongly enhanced by the PhoPc phenotype in **Salmonella** enterica serovar Typhimurium.
- L3 ANSWER 2 OF 10 MEDLINE on STN  
TI Clearance of infection with Mycobacterium bovis BCG in mice is enhanced by treatment with S28463 (R-848), and its efficiency depends on expression of wild-type Nramp1 (resistance allele).
- L3 ANSWER 3 OF 10 MEDLINE on STN  
TI Mucosal vaccination with a recombinant **Salmonella** typhimurium expressing human **papillomavirus** type 16 (HPV16) L1 virus-like particles (VLPs) or HPV16 VLPs purified from insect cells inhibits the growth of HPV16-expressing tumor cells in mice.
- L3 ANSWER 4 OF 10 MEDLINE on STN  
TI Differences in the effectiveness of delivery of B- and CTL-epitopes incorporated into the hepatitis B core antigen (HBcAg) c/e1-region.
- L3 ANSWER 5 OF 10 MEDLINE on STN  
TI The nature of the attenuation of **Salmonella** typhimurium strains expressing human **papillomavirus** type 16 virus-like particles determines the systemic and mucosal antibody responses in nasally immunized mice.
- L3 ANSWER 6 OF 10 MEDLINE on STN  
TI Enhanced immunogenicity of a recombinant genital warts vaccine adjuvanted with monophosphoryl lipid A.
- L3 ANSWER 7 OF 10 MEDLINE on STN  
TI Human **papillomavirus** type 16 virus-like particles expressed in attenuated **Salmonella** typhimurium elicit mucosal and systemic neutralizing antibodies in mice.
- L3 ANSWER 8 OF 10 MEDLINE on STN  
TI Mutagenicity of endocervical mucus associated with genital tract infections.
- L3 ANSWER 9 OF 10 MEDLINE on STN  
TI Induction of an antibody response in mice against human **papillomavirus** (HPV) type 16 after immunization with HPV recombinant **Salmonella** strains.
- L3 ANSWER 10 OF 10 MEDLINE on STN  
TI Immunisation of mice using **Salmonella** typhimurium expressing human **papillomavirus** type 16 E7 epitopes inserted into hepatitis B virus core antigen.

d his

(FILE 'HOME' ENTERED AT 08:57:52 ON 07 JUL 2004)

FILE 'MEDLINE' ENTERED AT 08:58:07 ON 07 JUL 2004

L1 53944 S SALMONELLA  
L2 14829 S PAPILLOMAVIRUS  
L3 10 S L1 AND L2

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CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS,  
DDFB, DDFU, DGENE, DRUGB, DRUGMONOG2, ...' ENTERED AT 09:01:38 ON 07 JUL  
2004

SEA L1 AND L2

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15982 FILE DGENE  
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L4 QUE L1 AND L2

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FILE 'SCISEARCH' ENTERED AT 09:02:30 ON 07 JUL 2004

L5 20 S L1 AND L2

FILE 'LIFESCI' ENTERED AT 09:05:59 ON 07 JUL 2004

L6 12 S L1 AND L2



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- ☐ 1: [Baud D, Benyacoub J, Revaz V, Kok M, Ponci F, Bobst M, Curtiss R 3rd, De Grandi P, Nardelli-Haeffliger D.](#) Related Articles, Links



Immunogenicity against human papillomavirus type 16 virus-like particles is strongly enhanced by the PhoPc phenotype in *Salmonella enterica* serovar Typhimurium.

Infect Immun. 2004 Feb;72(2):750-6.

PMID: 14742517 [PubMed - indexed for MEDLINE]

- ☐ 2: [Benyacoub J, Hopkins S, Potts A, Kelly S, Kraehenbuhl JP, Curtiss R 3rd, De Grandi P, Nardelli-Haeffliger D.](#) Related Articles, Links



The nature of the attenuation of *Salmonella typhimurium* strains expressing human papillomavirus type 16 virus-like particles determines the systemic and mucosal antibody responses in nasally immunized mice.

Infect Immun. 1999 Jul;67(7):3674-9.

PMID: 10377159 [PubMed - indexed for MEDLINE]

- ☐ 3: [Nardelli-Haeffliger D, Roden RB, Benyacoub J, Sahli R, Kraehenbuhl JP, Schiller JT, Lachat P, Potts A, De Grandi P.](#) Related Articles, Links



Human papillomavirus type 16 virus-like particles expressed in attenuated *Salmonella typhimurium* elicit mucosal and systemic neutralizing antibodies in mice.

Infect Immun. 1997 Aug;65(8):3328-36.

PMID: 9234794 [PubMed - indexed for MEDLINE]

- ☐ 4: [Miller SI, Mekalanos JJ.](#) Related Articles, Links



Constitutive expression of the phoP regulon attenuates *Salmonella* virulence and survival within macrophages.

J Bacteriol. 1990 May;172(5):2485-90.

PMID: 2185222 [PubMed - indexed for MEDLINE]

- ☐ 5: [Beuzon CR, Unsworth KE, Holden DW.](#) Related Articles, Links



In vivo genetic analysis indicates that PhoP-PhoQ and the *Salmonella* pathogenicity island 2 type III secretion system contribute independently to *Salmonella enterica* serovar Typhimurium virulence.

Infect Immun. 2001 Dec;69(12):7254-61.


PMID: 11705895 [PubMed - indexed for MEDLINE]


- ☐ 6: [Krul MR, Tijhaar EJ, Kleijne JA, Van Loon AM, Nievers MG, Schipper H, Geerse L, Van der Kolk M, Steerenberg PA, Mooi FR, Den Otter W.](#) Related Articles, Links




Induction of an antibody response in mice against human papillomavirus (HPV) type 16 after immunization with HPV recombinant *Salmonella* strains.

Cancer Immunol Immunother. 1996 Sep;43(1):44-8.  
PMID: 8917635 [PubMed - indexed for MEDLINE]


-  **7:** [Corthesy-Theulaz IE, Hopkins S, Bachmann D, Saldinger PF, Porta N, Haas R, Zheng-Xin Y, Meyer T, Bouzourene H, Blum AL, Kraehenbuhl JP.](#) [Related Articles, Links](#)

 Mice are protected from *Helicobacter pylori* infection by nasal immunization with attenuated *Salmonella typhimurium* phoPc expressing urease A and B subunits.  
Infect Immun. 1998 Feb;66(2):581-6.  
PMID: 9453612 [PubMed - indexed for MEDLINE]


-  **8:** [Angelakopoulos H, Hohmann EL.](#) [Related Articles, Links](#)


 Pilot study of phoP/phoQ-deleted *Salmonella enterica* serovar typhimurium expressing *Helicobacter pylori* urease in adult volunteers.  
Infect Immun. 2000 Apr;68(4):2135-41.  
PMID: 10722611 [PubMed - indexed for MEDLINE]


-  **9:** [Marais D, Passmore JA, Maclean J, Rose R, Williamson AL.](#) [Related Articles, Links](#)


 A recombinant human papillomavirus (HPV) type 16 L1-vaccinia virus murine challenge model demonstrates cell-mediated immunity against HPV virus-like particles.  
J Gen Virol. 1999 Sep;80 (Pt 9):2471-5.  
PMID: 10501503 [PubMed - indexed for MEDLINE]


-  **10:** [Miller SI, Kukral AM, Mekalanos JJ.](#) [Related Articles, Links](#)

 A two-component regulatory system (phoP phoQ) controls *Salmonella typhimurium* virulence.  
Proc Natl Acad Sci U S A. 1989 Jul;86(13):5054-8.  
PMID: 2544889 [PubMed - indexed for MEDLINE]


-  **11:** [Kozarov E, Miyashita N, Burks J, Cervený K, Brown TA, McArthur WP, Progulske-Fox A.](#) [Related Articles, Links](#)


 Expression and immunogenicity of hemagglutinin A from *Porphyromonas gingivalis* in an avirulent *Salmonella enterica* serovar typhimurium vaccine strain.  
Infect Immun. 2000 Feb;68(2):732-9.  
PMID: 10639440 [PubMed - indexed for MEDLINE]


-  **12:** [Miller SI, Loomis WP, Alpuche-Aranda C, Behlau I, Hohmann E.](#) [Related Articles, Links](#)

 The PhoP virulence regulon and live oral *Salmonella* vaccines.  
Vaccine. 1993;11(2):122-5.  
PMID: 8438611 [PubMed - indexed for MEDLINE]

-  **13:** [Miller SI, Pulkkinen WS, Selsted ME, Mekalanos JJ.](#) [Related Articles, Links](#)

 Characterization of defensin resistance phenotypes associated with mutations in the phoP virulence regulon of *Salmonella typhimurium*.  
Infect Immun. 1990 Nov;58(11):3706-10.  
PMID: 2172166 [PubMed - indexed for MEDLINE]

-  **14:** [Sanowar S, Martel A, Moual HL.](#) [Related Articles, Links](#)

 Mutational analysis of the residue at position 48 in the *Salmonella enterica* Serovar Typhimurium PhoQ sensor kinase.  
J Bacteriol. 2003 Mar;185(6):1935-41.

PMID: 12618457 [PubMed - indexed for MEDLINE]

- ☐ **15:** [Matsui H, Kawakami T, Ishikawa S, Danbara H, Gulig PA.](#) [Related Articles, Links](#)



**Constitutively expressed phoP inhibits mouse-virulence of Salmonella typhimurium in an Spv-dependent manner.**

Microbiol Immunol. 2000;44(6):447-54.

PMID: 10941927 [PubMed - indexed for MEDLINE]

- ☐ **16:** [Soncini FC, Vescovi EG, Groisman EA.](#) [Related Articles, Links](#)



**Transcriptional autoregulation of the Salmonella typhimurium phoPQ operon.**

J Bacteriol. 1995 Aug;177(15):4364-71.

PMID: 7543474 [PubMed - indexed for MEDLINE]

- ☐ **17:** [Revaz V, Benyacoub J, Kast WM, Schiller JT, De Grandi P, Nardelli-Haeffliger D.](#) [Related Articles, Links](#)



**Mucosal vaccination with a recombinant Salmonella typhimurium expressing human papillomavirus type 16 (HPV16) L1 virus-like particles (VLPs) or HPV16 VLPs purified from insect cells inhibits the growth of HPV16-expressing tumor cells in mice.**

Virology. 2001 Jan 5;279(1):354-60.

PMID: 11145916 [PubMed - indexed for MEDLINE]

- ☐ **18:** [Fayolle C, O'Callaghan D, Martineau P, Charbit A, Clement JM, Hofnung M, Leclerc C.](#) [Related Articles, Links](#)



**Genetic control of antibody responses induced against an antigen delivered by recombinant attenuated Salmonella typhimurium.**

Infect Immun. 1994 Oct;62(10):4310-9.

PMID: 7927689 [PubMed - indexed for MEDLINE]

- ☐ **19:** [Zhao P, Ke S, Wang HW, Qian F, Qi ZT.](#) [Related Articles, Links](#)



**[Enhancement by an in vivo-activated promoter of immunogenicity of recombinant attenuated Salmonella typhimurium expressing hepatitis C virus core antigen]**

Sheng Wu Hua Xue Yu Sheng Wu Wu Li Xue Bao (Shanghai). 2003 Mar;35(3):266-70. Chinese.

PMID: 12621552 [PubMed - indexed for MEDLINE]

- ☐ **20:** [Iyoda S, Kamidoi T, Hirose K, Kutsukake K, Watanabe H.](#) [Related Articles, Links](#)



**A flagellar gene fliZ regulates the expression of invasion genes and virulence phenotype in Salmonella enterica serovar Typhimurium.**

Microb Pathog. 2001 Feb;30(2):81-90.

PMID: 11162188 [PubMed - indexed for MEDLINE]

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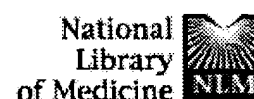
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### Induction of an antibody response in mice against human papillomavirus (HPV) type 16 after immunization with HPV recombinant Salmonella strains.

Krul MR, Tijhaar EJ, Kleijne JA, Van Loon AM, Nievers MG, Schipper H, Geerse L, Van der Kolk M, Steerenberg PA, Mooi FR, Den Otter W.

European Cancer Centre, Amsterdam, The Netherlands. [ecc@euronet.nl](mailto:ecc@euronet.nl)

Human papillomaviruses (HPV) are present in approximately 95% of all cervical carcinomas and the HPV E6 and E7 genes are continuously expressed in these lesions. There is also circumstantial evidence that often natural immunity against HPV is generated and that this is of influence on HPV-induced lesions. Stimulation of the immune system by proper presentation of relevant HPV antigens might, therefore, lead to a prophylactic or therapeutic immunological intervention for HPV-induced lesions. For this purpose we have expressed the E6 and E7 protein of HPV 16 in an attenuated strain of *Salmonella typhimurium* (SL3261, *aroA* mutation), which has been used extensively as a live vector. Live recombinant *Salmonella* vaccines have the ability to elicit humoral, secretory and cell-mediated immune responses, including cytotoxic T cells, against the heterologous antigens they express. This report describes the construction of recombinant *Salmonella* strains expressing the HPV 16 E6 and E7 proteins, and the induction of an HPV-16-specific immune response in mice after immunization with these live vectors.

PMID: 8917635 [PubMed - indexed for MEDLINE]

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☐ 1. Document ID: US 6737239 B2

L2: Entry 1 of 36

File: USPT

May 18, 2004

US-PAT-NO: 6737239

DOCUMENT-IDENTIFIER: US 6737239 B2

TITLE: Nucleic acid sequence detection employing probes comprising non-nucleosidic coumarin derivatives as polynucleotide-crosslinking agents

DATE-ISSUED: May 18, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Wood; Michael L.	Mountain View	CA		
Albagli; David	Millbrae	CA		
Van Atta; Reuel B.	Mountain View	CA		
Thien; Douglas Y.	Menlo Park	CA		
Cheng; Peter C.	San Jose	CA		
Huan; Bingfang	Cupertino	CA		

US-CL-CURRENT: 435/6; 514/44, 536/24.3, 536/24.5

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	RWD	Draw. D.
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☐ 2. Document ID: US 6719978 B2

L2: Entry 2 of 36

File: USPT

Apr 13, 2004

US-PAT-NO: 6719978

DOCUMENT-IDENTIFIER: US 6719978 B2

TITLE: Virus-like particles for the induction of autoantibodies

DATE-ISSUED: April 13, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Schiller; John T.	Silver Spring	MD		
Chackerian; Bryce	Chevy Chase	MD		
Lowy; Douglas R.	Bethesda	MD		

US-CL-CURRENT: 424/199.1; 424/133.1, 424/143.1, 424/144.1, 424/147.1, 424/159.1,  
424/184.1, 424/194.1, 424/204.1, 435/174, 435/235.1, 435/472, 530/350

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw. De
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☐ 3. Document ID: US 6660521 B2

L2: Entry 3 of 36

File: USPT

Dec 9, 2003

US-PAT-NO: 6660521

DOCUMENT-IDENTIFIER: US 6660521 B2

TITLE: Use of trans-activation and CIS-activation to increase the persistence of a transgene in an at least E4-deficient adenovirus

DATE-ISSUED: December 9, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Brough; Douglas E.	Olney	MD		
Kovesdi; Imre	Rockville	MD		

US-CL-CURRENT: 435/320.1; 424/93.2, 424/93.6

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw. De
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☐ 4. Document ID: US 6627202 B2

L2: Entry 4 of 36

File: USPT

Sep 30, 2003

US-PAT-NO: 6627202

DOCUMENT-IDENTIFIER: US 6627202 B2

TITLE: HBV core antigen particles with multiple immunogenic components attached via peptide ligands

DATE-ISSUED: September 30, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Murray; Kenneth	Edinburgh			GB

US-CL-CURRENT: 424/227.1; 424/194.1, 424/196.11, 424/197.11, 424/201.1, 424/202.1,  
530/403

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw. De
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☐ 5. Document ID: US 6534489 B1

L2: Entry 5 of 36

File: USPT

Mar 18, 2003

US-PAT-NO: 6534489  
DOCUMENT-IDENTIFIER: US 6534489 B1

TITLE: Organophosphorus compounds and the use thereof

DATE-ISSUED: March 18, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jomaa; Hassan	Giessen			DE

US-CL-CURRENT: 514/114; 558/166, 558/169, 558/175

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw. De
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☐ 6. Document ID: US 6500641 B1

L2: Entry 6 of 36

File: USPT

Dec 31, 2002

US-PAT-NO: 6500641  
DOCUMENT-IDENTIFIER: US 6500641 B1

TITLE: Compositions and methods for identifying antigens which elicit an immune response

DATE-ISSUED: December 31, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Chen; Si-Yi	Pearland	TX		
You; Zhaoyang	Houston	TX		

US-CL-CURRENT: 435/69.1; 424/159.1, 435/6, 530/387.3, 530/388.3

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw. De
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☐ 7. Document ID: US 6495676 B1

L2: Entry 7 of 36

File: USPT

Dec 17, 2002

US-PAT-NO: 6495676  
DOCUMENT-IDENTIFIER: US 6495676 B1

TITLE: Nucleic acid sequence detection employing probes comprising non-nucleosidic coumarin derivatives as polynucleotide-crosslinking agents

DATE-ISSUED: December 17, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
------	------	-------	----------	---------

Wood; Michael L.	Mountain View	CA
Albagli; David	Millbrae	CA
Van Atta; Reuel B.	Mountain View	CA
Thien; Douglas Y.	Menlo Park	CA
Cheng; Peter C.	San Jose	CA
Huan; Bingfang	Cupertino	CA

US-CL-CURRENT: 536/25.3; 435/6, 536/25.31, 536/25.32

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	RMK	Draw D
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☐ 8. Document ID: US 6479279 B2

L2: Entry 8 of 36

File: USPT

Nov 12, 2002

US-PAT-NO: 6479279

DOCUMENT-IDENTIFIER: US 6479279 B2

TITLE: Episomal vectors and uses thereof

DATE-ISSUED: November 12, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ustav; Mart	Tartu			EE

US-CL-CURRENT: 435/320.1; 435/455, 435/456, 435/457, 536/23.1, 536/23.72, 536/24.1

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	RMK	Draw D
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☐ 9. Document ID: US 6458368 B1

L2: Entry 9 of 36

File: USPT

Oct 1, 2002

US-PAT-NO: 6458368

DOCUMENT-IDENTIFIER: US 6458368 B1

TITLE: Attenuated microorganism strains expressing HPV proteins

DATE-ISSUED: October 1, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Haefliger; Denise Nardelli	Lausanne			CH
Kraehenbuhl; Jean-Pierre	Rivaz			CH

US-CL-CURRENT: 424/258.1; 424/192.1, 424/204.1, 424/234.1, 424/93.1, 424/93.2,  
435/235.1, 435/320.1, 435/5, 435/7.1

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw. De
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☐ 10. Document ID: US 6444805 B1

L2: Entry 10 of 36

File: USPT

Sep 3, 2002

US-PAT-NO: 6444805

DOCUMENT-IDENTIFIER: US 6444805 B1

TITLE: Recombinant human papillomavirus vaccine expressed in transgenic plants

DATE-ISSUED: September 3, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sohn; Ulk	Taegu			KR
Nam; Hong Gil	Pohang			KR
Park; Deok Hoon	Pohang			KR
Kim; Kuk Hyun	Pohang			KR

US-CL-CURRENT: 536/23.72; 424/204.1

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Draw. De
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Salmonella and papillomavirus.clm.	36

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☐ 1. Document ID: WO 2004026336 A1

L3: Entry 1 of 15

File: DWPI

Apr 1, 2004

DERWENT-ACC-NO: 2004-283154

DERWENT-WEEK: 200426

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TITLE: Production of vaccine composition of labile immunogens, involves spraying fluid comprising immunogens into reactor having fluidized particles of water soluble material, and collecting dried immunogen containing particles, from reactor

INVENTOR: KO, T S; SO, A W ; WONG, T

PRIORITY-DATA: 2002AU-0951692 (September 23, 2002)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 2004026336 A1	April 1, 2004	E	044	A61K039/00

INT-CL (IPC): [A61 K 39/00](#); [A61 P 31/04](#); [A61 P 31/12](#); [A61 P 31/16](#); [A61 P 31/22](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Index	Claims	MMO	Draw. Data
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☐ 2. Document ID: US 20040043973 A1

L3: Entry 2 of 15

File: DWPI

Mar 4, 2004

DERWENT-ACC-NO: 2004-280782

DERWENT-WEEK: 200437

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TITLE: New 16-alpha-bromo-3-beta-hydroxy-5-alpha-androstan-17-one hemihydrate, useful for the treatment or prevention of pathogenic infection e.g. HIV-1, cancer, burn, schizophrenia and multiple sclerosis

INVENTOR: AHLEM, C N; CARVALHO, L D ; HEGGIE, W

PRIORITY-DATA: 2000US-190140P (March 16, 2000), 2000US-0535675 (March 23, 2000), 2002US-0319356 (December 13, 2002)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 20040043973 A1	March 4, 2004		108	A61K031/573

INT-CL (IPC): A61 K 31/573; A61 K 31/7072; A61 K 31/7076; A61 K 38/13; C07 J 1/00

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	RMC	Draw. D
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☐ 3. Document ID: US 20040009145 A1, US 6692732 B2

L3: Entry 3 of 15

File: DWPI

Jan 15, 2004

DERWENT-ACC-NO: 2004-224165

DERWENT-WEEK: 200421

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TITLE: Use of a polymer having a cationic group for inhibiting pathogenic toxins produced by microorganisms e.g. virus, bacteria, fungi, protozoa or parasite in a mammal

INVENTOR: BACON KURTZ, C I; FITZPATRICK, R ; HUVAL, C C ; MANDEVILLE, W H ; NEENAN, T X ; KURTZ, C I B

PRIORITY-DATA: 2000US-0597343 (June 19, 2000), 1997US-0934495 (September 19, 1997), 1999US-0412474 (October 5, 1999), 2001US-0912253 (July 24, 2001), 2002US-0324623 (December 19, 2002)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>US 20040009145 A1</u>	January 15, 2004		020	A61K031/785
<u>US 6692732 B2</u>	February 17, 2004		000	A61K031/74

INT-CL (IPC): A61 K 31/74; A61 K 31/765; A61 K 31/785; A61 K 31/795

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	RMC	Draw. D
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☐ 4. Document ID: US 6737239 B2, US 20030134274 A1

L3: Entry 4 of 15

File: DWPI

May 18, 2004

DERWENT-ACC-NO: 2003-829632

DERWENT-WEEK: 200440

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TITLE: Detecting nucleic acid in sample comprises hybridizing nucleic acid to probe that comprises crosslinking agent forming covalent crosslink between probe and nucleic acid and detecting crosslinked nucleic acid pair

INVENTOR: ALBAGLI, D; CHENG, P C ; HUAN, B ; THIEN, D Y ; VAN ATTA, R B ; WOOD, M L

PRIORITY-DATA: 1999US-0390124 (September 3, 1999), 1993US-0046568 (April 13, 1993), 1994US-0364339 (December 27, 1994), 1995US-0401630 (March 9, 1995), 1995US-0487034 (June 7, 1995), 1998US-0149161 (September 4, 1998), 2002US-0272466 (October 15, 2002)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>US 6737239 B2</u>	May 18, 2004		000	C12Q001/68



US 20030134274 A1

July 17, 2003

021

C12Q001/70

INT-CL (IPC): C07 H 21/00; C12 Q 1/68; C12 Q 1/70

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWMC	Drawings
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☐ 5. Document ID: US 6495676 B1

L3: Entry 5 of 15

File: DWPI

Dec 17, 2002

DERWENT-ACC-NO: 2003-327472

DERWENT-WEEK: 200377

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TITLE: Detecting target nucleic acid, by hybridizing target to crosslinkable probe with a complementary polynucleotide and crosslinking group, activating group to crosslink probe and target, detecting crosslinked pair

INVENTOR: ALBAGLI, D; CHENG, P C ; HUAN, B ; THIEN, D Y ; VAN ATTA, R B ; WOOD, M L

PRIORITY-DATA: 1999US-0390124 (September 3, 1999), 1993US-0046568 (April 13, 1993), 1994US-0364339 (December 27, 1994), 1995US-0401630 (March 9, 1995), 1995US-0487034 (June 7, 1995), 1995US-0577121 (December 22, 1995), 1998US-0149161 (September 4, 1998)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 6495676 B1	December 17, 2002		024	C07H021/00

INT-CL (IPC): C07 H 21/00

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KWMC	Drawings
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☐ 6. Document ID: JP 2004509082 W, WO 200217917 A1, AU 200188546 A, EP 1318810 A1, US 20040019029 A1

L3: Entry 6 of 15

File: DWPI

Mar 25, 2004

DERWENT-ACC-NO: 2002-315501

DERWENT-WEEK: 200422

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TITLE: Treatment of infectious disease caused by e.g. parasite, bacteria or virus, comprises administration of manzamine alkaloids

INVENTOR: EL-SAYED, K A; HAMANN, M T ; EL-SAYED, K

PRIORITY-DATA: 2000US-228892P (August 29, 2000), 2003US-0362400 (July 22, 2003)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 2004509082 W	March 25, 2004		101	A61K031/475
WO 200217917 A1	March 7, 2002	E	063	A61K031/44

AU 200188546 A	March 13, 2002		000	A61K031/44
EP 1318810 A1	June 18, 2003	E	000	A61K031/44
US 20040019029 A1	January 29, 2004		000	A61K031/33

INT-CL (IPC): A61 K 31/33; A61 K 31/44; A61 K 31/475; A61 K 35/56; A61 P 31/04; A61 P 31/12; A61 P 31/18; A61 P 31/20; A61 P 31/22; A61 P 33/02; A61 P 33/06

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	FIGS	Draw. De
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☐ 7. Document ID: MX 2002012039 A1, WO 200193829 A2, AU 200175371 A, US 20020120228 A1, EP 1289494 A2, KR 2003020294 A, CN 1438874 A, JP 2003535119 W, BR 200111494 A

L3: Entry 7 of 15

File: DWPI

Jun 1, 2003

DERWENT-ACC-NO: 2002-139635

DERWENT-WEEK: 200417

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TITLE: Gel-forming free-flowing powder, useful as a vaccine, comprises aqueous suspension comprising aluminum or calcium salt-adjuvant with an antigen adsorbed on it, saccharide, amino acid or its salt, colloidal substance

INVENTOR: MAA, Y; PRESTRELSKI, S J ; ZHAO, L

PRIORITY-DATA: 2000US-0590777 (June 8, 2000), 2000US-210581P (June 8, 2000), 2001US-0877726 (June 8, 2001)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
MX 2002012039 A1	June 1, 2003		000	A61K009/00
WO 200193829 A2	December 13, 2001	E	052	A61K009/00
AU 200175371 A	December 17, 2001		000	
US 20020120228 A1	August 29, 2002		000	A61K039/12
EP 1289494 A2	March 12, 2003	E	000	A61K009/00
KR 2003020294 A	March 8, 2003		000	A61K009/14
CN 1438874 A	August 27, 2003		000	A61K009/00
JP 2003535119 W	November 25, 2003		055	A61K009/14
BR 200111494 A	January 13, 2004		000	A61K009/00

INT-CL (IPC): A61 K 9/00; A61 K 9/10; A61 K 9/14; A61 K 9/16; A61 K 31/70; A61 K 39/02; A61 K 39/12; A61 K 39/29; A61 K 39/39; A61 K 47/02; A61 K 47/10; A61 K 47/18; A61 K 47/26; A61 K 47/36; A61 K 47/42; A61 P 31/12

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	FIGS	Draw. De
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☐ 8. Document ID: EP 1303639 A2, WO 200179548 A2, AU 200193366 A

L3: Entry 8 of 15

File: DWPI

Apr 23, 2003

DERWENT-ACC-NO: 2002-034366

DERWENT-WEEK: 200329

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TITLE: Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch

INVENTOR: BARANY, F; FAVIS, R ; GERRY, N P ; KLIMAN, R ; ZIRVI, M

PRIORITY-DATA: 2000US-197271P (April 14, 2000)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>EP 1303639 A2</u>	April 23, 2003	E	000	C12Q001/68
<u>WO 200179548 A2</u>	October 25, 2001	E	191	C12Q001/68
<u>AU 200193366 A</u>	October 30, 2001		000	C12Q001/68

INT-CL (IPC): C12 Q 1/68

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	FIGS	Draw. Des
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☐ 9. Document ID: US 20040033994 A1, WO 200066094 A2, DE 19920247 A1, AU 200050639 A, EP 1173183 A2, NO 200105368 A, JP 2002543113 W, US 6638957 B1

L3: Entry 9 of 15

File: DWPI

Feb 19, 2004

DERWENT-ACC-NO: 2001-024731

DERWENT-WEEK: 200414

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TITLE: Use of heterocyclic compounds as inhibitors of DOXP metabolic pathways in the treatment of viral, fungal and parasitic infection, and as herbicides.

INVENTOR: JOMAA, H

PRIORITY-DATA: 1999DE-1020247 (May 3, 1999)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>US 20040033994 A1</u>	February 19, 2004		000	A61K031/675
<u>WO 200066094 A2</u>	November 9, 2000	G	045	A61K031/00
<u>DE 19920247 A1</u>	November 16, 2000		000	A61K031/675
<u>AU 200050639 A</u>	November 17, 2000		000	
<u>EP 1173183 A2</u>	January 23, 2002	G	000	A61K031/675
<u>NO 200105368 A</u>	November 2, 2001		000	A61K000/00
<u>JP 2002543113 W</u>	December 17, 2002		075	C07D261/04
<u>US 6638957 B1</u>	October 28, 2003		000	A61K031/42

INT-CL (IPC): A01 N 57/24; A61 K 0/00; A61 K 31/00; A61 K 31/42; A61 K 31/422; A61 K 31/535; A61 K 31/5355; A61 K 31/66 ; A61 K 31/662; A61 K 31/675; A61 P 1/02; A61 P 1/04; A61 P 1/16; A61 P 3/10; A61 P 7/00; A61 P 9/10; A61 P 11/00; A61 P 15/00; A61 P 17/00; A61 P 27/02; A61 P 29/00; A61 P 31/00; A61 P 31/04; A61 P 31/10; A61 P 31/12; A61 P 33/00; A61 P 35/00; A61 P 37/00; C07 D 261/04; C07 D 265/02; C07 D 413/06; C07 F 9/653 ; C07 F 9/6533

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Drawn De
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☐ 10. Document ID: WO 200044359 A2, AU 200027989 A, DE 19903398 A1

L3: Entry 10 of 15

File: DWPI

Aug 3, 2000

DERWENT-ACC-NO: 2000-505901

DERWENT-WEEK: 200057

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TITLE: Use of thiadiazole derivatives for the treatment of viral, bacterial, fungal or parasitic infections in humans and animals

INVENTOR: JOMAA, H

PRIORITY-DATA: 1999DE-1003398 (January 29, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>WO 200044359 A2</u>	August 3, 2000	G	017	A61K031/00
<u>AU 200027989 A</u>	August 18, 2000		000	A61K031/00
<u>DE 19903398 A1</u>	August 10, 2000		000	A61K031/433

INT-CL (IPC): A61 K 31/00; A61 K 31/433

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KWIC	Drawn De
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Salmonella and papillomavirus	15

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		<i>DB=JPAB; PLUR=YES; OP=ADJ</i>	
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<input type="checkbox"/>	L3	Salmonella and papillomavirus	15
		<i>DB=USPT; PLUR=YES; OP=ADJ</i>	
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☐ 1: J Natl Cancer Inst. 2003 Aug 6;95(15):1128-37.

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- J Natl Cancer Inst. 2004 Mar 3;96(5):412-3; author reply 413-4.

Full text article at  
[jncicancerspectrum.  
oupjournals.org](http://jncicancerspectrum.oupjournals.org)

### Specific antibody levels at the cervix during the menstrual cycle of women vaccinated with human papillomavirus 16 virus-like particles.

**Nardelli-Haeffliger D, Wirthner D, Schiller JT, Lowy DR, Hildesheim A, Ponci F, De Grandi P.**

Department of Gynecology, Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland.

**BACKGROUND:** In early-phase trials, a human papillomavirus 16 (HPV16) virus-like particle (VLP) vaccine has been shown to be well tolerated, immunogenic, and protective against HPV16 in women, most of whom were taking oral contraceptives. Previous studies have not determined whether HPV immunization results in specific antibody levels in the human genital tract or whether these levels might vary during contraceptive or ovulatory cycles. Therefore, we determined the levels of total and specific antibodies in the cervical secretions of women who had been immunized with HPV16 VLPs and examined the influence of the menstrual cycle and oral contraceptive use on these levels. **METHODS:** Two groups of women were immunized, seven who were taking oral contraceptives and 11 who were ovulating. After seroconversion, serum and cervical secretions were collected twice weekly for 5 weeks. Total immunoglobulins (IgG and IgA) and vaccine-specific IgGs were determined by enzyme-linked immunosorbent assay. Nonparametric statistical analyses were used to determine the statistical significance of differences in IgG levels between groups, and correlations between serum- and cervical-specific IgG levels were determined by the Spearman correlation coefficient. **RESULTS:** All participants developed detectable titers of anti-HPV16 VLP IgGs in their cervical secretions after immunization. The cervical titers of specific IgG and total IgGs and IgAs among participants in the contraceptive group were relatively constant throughout the contraceptive cycle. In contrast, the cervical titers of specific IgG and total IgGs and IgAs among participants in the ovulatory group varied during the menstrual cycle, being highest during

the proliferative phase, decreasing approximately ninefold around ovulation, and increasing approximately threefold during the luteal phase. Serum- and cervical-specific IgG levels were correlated ( $r = .86$ ) in women in the contraceptive group but not in women in the ovulatory group ( $r = .27$ ).

**CONCLUSIONS:** The relatively high titer of anti-HPV16 antibodies at the cervix is promising in terms of vaccine efficacy; however, the decrease in antibody titer around ovulation raises the possibility that the HPV16 VLP vaccine might be less effective during the peri-ovulatory phase.

PMID: 12902442 [PubMed - indexed for MEDLINE]

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Jun 7 2004 18:11:57

anogenital tract (especially the cervix). VLP's are also used, when immobilised, for detecting antibodies specific for PV (claimed). VLP's induce a human PV (HPV)-specific, conformation-dependent and neutralising antibody response in serum and genital secretions, and also induce cytotoxic T lymphocytes (CTL) able to kill cells already infected with HPV. (A) are administered to the oral, nasal, rectal or genital mucosa. ADVANTAGE - Properly assembled VLP, essential for antibody induction can now be produced in attenuated bacteria. US20020025328A Attenuated strain of a prokaryotic microorganism (A), transformed with nucleic acid (I) encoding papilloma virus (PV) major capsid protein (II), is new. (II) assembles in (A) to form virus-like particles (VLP). USE - (A) are useful in the preparation of therapeutic and vaccines (claimed), particularly mucosal, to prevent or treat PV infections or related cancers of the anogenital tract (especially the cervix). VLP's are also used, when immobilised, for detecting antibodies specific for PV (claimed). VLP's induce a human PV (HPV)-specific, conformation-dependent and neutralising antibody response in serum and genital secretions, and also induce cytotoxic T lymphocytes (CTL) able to kill cells already infected with HPV. (A) are administered to the oral, nasal, rectal or genital mucosa. ADVANTAGE - Properly assembled VLP, essential for antibody induction can now be produced in attenuated bacteria. WO 9815631A

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